## REMARKS

Reconsideration of the application is requested in view of the modifications above and the remarks below. Applicants acknowledge the withdrawal of the rejection under 35 USC 102. The undersigned appreciates the Examiner's suggestions that Applicants indicate that the measurement encompassed in Claim 1 to be "direct."

### Rejection Under 35 USC 103

The Office Action rejected Claims 1-8 under 35 USC 103 over U.S. Pat. No. 5,279,945 (Hummel).

The rejection should be withdrawn. It is well settled that to establish a *prima facie* case of obviousness, the USPTO must satisfy all of the following requirements. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or to combine references. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification must have had a reasonable expectation of success, as determined from the vantage point of one of ordinary skill in the art at the time the invention was made. *Amgen v. Chugai Pharmaceutical Co.* 18 USPQ 2d 1016, 1023 (Fed Cir, 1991), *cert. denied* 502 U.S. 856 (1991). Third, the prior art reference or combination of references must teach or suggest all of the limitations of the claims. *In re Wilson*, 165 USPQ 494, 496, (CCPA 1970).

In view of the modifications above, Applicants' invention relates to a method that involves performing a concentration direct determination of polyaspartic acids and/or salts thereof in aqueous systems by fluorometry. In one embodiment, the concentration determination is performed on-line using a dosing apparatus or facility. In another embodiment, polyaspartic acids and/or salts thereof in the range of 0.1 to 1000 ppm are determined fluorometrically. The other embodiments encompassed by Applicants' invention are encompassed by claims listed above.

Hummel teaches an analytical method for determining aspartame concentration which can be carried out with relatively stable and readily available

enzyme products, which takes place smoothly. The method involves bringing about an enzymatic reaction for detecting the products thereof which is co-catalyzed by adenine dinucleotide, by either (a) reacting the resulting aspartate acid by means of an enzyme-containing cell extract which converts aspartic acid in the presence of $NADP^+$, with the addition of $NADP^+$, and measuring the concentration of the aspartame via the formation of NADPH or $NH_3$ or (b) detaching the ester group from the phenylalanine methyl ester enzymatically by means of chymotrypsin and converting the resulting L-phenylalanine enzymatically by means of phenylalanine dehydrogenase in the presence of $NAD^+$ into phenylpyruvate, and measuring the aspartame concentration via the formation of NADH or $NH_3$.

Hummel appears to exhibit an indirect method for determining the concentration of aspartic acid in a water sample and not polyaspartic acid. Aspartic acid is therefore reacted with nicotinamide adenine dinucleotide phosphate (NADP) in the presence of a cell extract which catalyzes the $NADP^+$ to produce an aspartic reaction product $NH_4^+$ and NADPH. At least the nicotinamide adenine dinucleotide phosphate (NADPH) is determined physically, for instance by fluorimetry. The concentration of aspartame is then produced by calculation.

One of ordinary skill in the art following the teachings of Hummel would not have been motivated to modify Hummel and practice Applicants' invention. A determination of the monomer (as described by Hummel's indirect determination method) would be a determination of the difference between the content of monomer before hydrolysis and the content of monomer after hydrolysis (to calculate the content of the active polymer). Such teachings would not have motivated one of ordinary skill in the art to modify Hummel and practice Applicants' method. In other words, Hummel's analytical method for determining aspartame concentration which can be carried out with relatively stable and readily available enzyme products, which takes place smoothly, would not have motivated one of ordinary skill in the art to practice a method that performs a concentration direct determination of polyaspartic acids and/or salts thereof in aqueous systems by fluorometry. Reconsideration is requested.

In view of the foregoing amendments and remarks, allowance of Claims 1-8 is earnestly requested.

Respectfully submitted,

By _____
Diderico van Eyl
Attorney for Applicants
Reg. No. 38,641

LANXESS Corporation
111 RIDC Park West Drive
Pittsburgh, Pennsylvania 15275-1112
(412) 809-2231
FACSIMILE PHONE NUMBER:
(412) 809-1054

/jme

S:\Chem Pittsburgh\Law Shared\SHARED\DVE\PATENTS\6454\6454 Response.doc